

TECHNICAL SOLUTIONS
NORTH AMERICA

February 25, 2010 Via FedEx



Ms. Cheryl L. Newton, Director Air and Radiation Division United States Environmental Protection Agency Region 5 77 W. Jackson Blvd. Chicago, IL 60604-3590

RE: Veolia ES Technical Solutions, L.L.C.
Title V Permit #: V-IL-1716300103-08-01
Significant Modification

Ms Newton,

Veolia ES Technical Solutions, L.L.C. (Veolia), hereby submits for your review a Significant Modification to the Part 71 Permit Number V-IL-1716300103-08-01. This Significant Modification request revises the OPL's (feed rate limits) for Hg, SVM and LVM calculated from performance testing in August and September, 2008 that were previously submitted in a Significant Modification dated January 6, 2009.

On October 10, 2008, Veolia submitted a Significant Modification Request to revise the OPL's (feed rate limits) for mercury, SVM and LVM that were demonstrated during the above referenced testing be incorporated into the Part 71 permit. On January 6, 2009, Veolia submitted revised OPL's for mercury, SVM and LVM. Veolia had discovered that its metal feed rate calculations did not account for the moisture content of the solid waste. As a result, Veolia recalculated the OPL's for mercury, SVM and LVM. After subsequent conversations with the Agency, Veolia has again revised the OPL's for Hg, SVM and LVM taking into account the most conservation moisture values for the solids fed during testing, historical feed rates and capping the extrapolated value to three times the actual calculated feed rates.

The justification for and the revised tables defining these OPL's is attached.

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Upon review of this submittal, should the Agency have a need for additional information or questions, please contact Dennis Warchol at (618) 271-2804 or via e-mail at dwarchol@onyxes.com or me at (618) 271-2804 or via e-mail at dharris@onyxes.com..

Sincerely.

Veolia ES Technical Solutions, L.L.C.

Doug Halfis

General Manager

Att.

CC:

Genevieve Damico, USEPA

USEPA File

Veolia ES Technical Solutions, L.L.C. Significant Modification to Part 71 Permit Title V Permit #: V-IL-1716300103-08-01

Pursuant to 40 CFR 71.7(e)(3), Veolia ES Technical Solutions, L.L.C. is submitting a significant modification to our Part 71 Permit number V-IL-1716300103-08-01. The following pages detail the requested modification, supporting information and justification for the modification. The requested modification is as follows:

Section 2.1 (C)(2) Operating Parameter Limits for Units 2, 3 and 4
 Mercury, SVM and LVM

Modification of operating parameter limit (OPL's) table in Section 2.1 (C)(2).

Pursuant to the Request to Provide Information Pursuant to the Clean Air Act dated June 5, 2008 and subsequently revised on September 12, 2008, attached is a revised Operating Parameter Limit (OPL's) table that reflects the mercury, SVM and LVM OPL's defined in 40 CFR 63.1209.

The OPL's were modified from the original significant modifications submitted on October 10, 2008 and January 6, 2009 to account for moisture content in the solid feeds, historical feed rates of these metals and capping the extrapolated rate at three times the actual tested feed rate.

Veolia has extrapolated metal feed rate limits for mercury, SVM and LVM. These feed rates were extrapolated using the protocol provided by USEPA (data sheets provided). However, based on the extremely high System Removal Efficiencies (SRE's) achieved during this testing, Veolia has lowered the extrapolated metal feed rates for SVM and LVM at Unit 4 to account for historical metal feed rate data as defined in 40 CFR 1209(n)(2)(ii)(B)(2).

In order for extrapolation to be utilized, Veolia conducted these performance tests using metal feedrates as defined in 40 CFR 1207 (f)(1)(x)(B), that were greater than "the historical of normal metals feed rates" fed to the units over the last four years. Veolia has provided to the Agency feed rate data for SVM, LVM and Mercury since July 1, 2004 to justify the above requirement. As is detailed, the metals fed to the incinerators during the performance test were higher than the historical range of normal metal feeds over the last four years.

As stated above, Veolia's extrapolated metal feed rates defined in the attached table used the extrapolated method defined in the Performance Test Plan as required by 40 CFR 1207 (f)(1)(x) (A) and given to Veolia by USEPA Region 5 as

an approved method, but also took into account historical metal feed rates for each unit in setting these extrapolated values, again as required by 40 CFR 1209 (n)(2)(ii)(B)(2). Veolia is requesting approval of these extrapolated feed rates not only because it followed the requirements of the Regulations but it has been the Agency's practice of permitting extrapolation with other Region 5 incinerators who in some cases were not required to follow 40 CFR 1207 (f)(1)(x) or 40 CFR 1209 (n)(2)(ii)(B)(2). Veolia has reviewed CPT plans (Project Number 07136-029-100 and Project Number 010302) from two other Region 5 incinerators and have found that both were allowed to extrapolate but did not provide all the information required in 40 CFR 1207 (f)(1)(x). It is also noted that in recent comments by the USEPA, Region 5 dated April 2, 2008 and signed by William MacDowell on one of these incinerator's CPT plans that the Agency acknowledges that the requirements for extrapolation were not raised in the approved 2003 plan and subsequent results that included extrapolation and "want to correct this oversight for the 2008 CPT." Veolia only details this to establish that a consistent pattern has not been used to approve or deny extrapolation but requests that Veolia's extrapolation be approved based on the merits of the test results and that the requirements for extrapolation have been complied with as defined in the MACT regulation.

Section 2.1(C)(2)

Permittee must operate Units 2, 3, and 4 under these operating parameter limits (OPL's) to demonstrate compliance with Subpart EEE.

Operating Parameters	Unit #2	Unit #3	Unit #4	AWFCO
Total Feedrate of mercury lbs/hr	0.0057	0.070	0.219	12-hour rolling averages
Total Feedrate of semi-	189	193	191	12-hour rolling
volatile metals lbs/hr				average limits
Total feedrate of low	140	143	151	12-hour rolling
volatile metals lbs/hr				average limits

	1 200	Total		Total		
		LVM Emis.		SVM Emis.		Ha Emis.
Stackflow	LVM Feed	Rate (ER)	SVM Feed	Rate (ER)	Hg Feed	Rate (ER)
Test Data Run (dscfm) (% dry)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Unit 2 (8/08) 1 5496 1172	40.0	4.0			0000	0000
9 5470			in the state of th		0.0023	0.000/91
7/00					0.0017	0.000822
3 5357 11.3					0.0016	0.000799
Unit 2 (9/08) 1 4698 11.21	46.82	0.000125	62.06	0.000398		
2 5099 10.91	46.52	0.0000438	63.46	0.000144		
3 5248 11.35	47.17	0.000101	63.27	0.000364		
Unit 3 (8/08) 1 5665 11.99	47.71	0.000388	64.07	0.000799	0.0016	0.000748
2 5719 10.96	47.31	0.000308	65	0.00103	0.0022	0.000938
3 5890 11.98	48.01	0.00022	63.78	0.000655	0.0018	0.000818
Unit 4 (8/08) 1 17280 12.27	50.61	0.000214	63.51	0.000	0.0257	0.00153
2 17255 12.13	50.65	0.000425	63.45	0.0013	0.026	966000.0
3 17189 11.63	49.79	0.000586	64.01	0.00116	0.0264	0.00108

xtrapo	plation R	Request Summary		<u> </u>		
		2008 Sig. Mod.	2008 Metal	2010 Sig. Mod.	2010 Metal	
	Metals	Extrap. Value Requested	Feed Basis	Extrap. Value Requested	Feed Basis	12 Hour Max
Unit	Group	(lb/hr)				(lb/hr)
2	LVM	399	47	140	47	84
2	SVM	459	63	189	63	91
2	Hg	0.017	0.0047	0.0057	0.0019	0.0055
3	LVM	399	51	143	48	77
3	SVM	459	65	193	64	82
3	Hg	0.017	0.0051	0.0057	0.0019	0.0054
4	LVM	500	55	151	50	77
4	SVM	500	65	191	64	58
4	Hg	0.257	0.030	0.078	0.026	0.060

[Maximum extrap. Value 3 times reed)		H2O)					
USEPA Approved Extrapolation Method	Method						The state of the s
	[1]	[2]	23	7	Proposed	Proposed	
	Removal		Max. ER at 75%	LVM Feedrate	Extrapolation	Extrapolation	
Em. Std.: 92 ug/dscm	Efficiency (RE)	Stackflow	of Standard	OPL	Limit (Total)	Limit (Pump.)	
(80/6)	(%)	(dscfm,7%O2)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	
	99.99973	6718	0.001734	649			
2	99.9991	7075	0.001826	1939			
8	99.99979	7614	0.001965	918			
Avg	99.99981	7136	0.001841	1169	140	140	
	Ξ	2	[5]	4	Proposed		
Unit 2 (SVM)	Removal		Max. ER at 75%	SVM Feedrate	Extrapolation		
Em. Std.: 230 ug/dscm	Efficiency (RE)	Stackflow	of Standard	OPL	Limit		
(80/6)	(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)		
	96 00036	6718	0.004334	676			
	00.000	0 10	10000	0/0			
7 6	99.99977	7075	0.004564	2012		77	
7	99.99942	/614	0.004912	854			
Avg	99.99952	7136	0.004604	1180	189		
	Ξ	[2]	23	3	Proposed		
Unit 2 (Hg)	Removal		Max. ER at 75%	Hg Feedrate	Extrapolation		
Em. Std.: 130 ug/dscm	Efficiency (RE)	Stackflow	of Standard	OPL	Limit	-	
(8/08)	(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)		
	65.61	8291	0.003024	0.0088		The state of the s	
2	51.65	8246	0.003007	0.0062			
က	50.06	7732	0.002819	0.0056			
Avg	55.77	0608	0.002950	6900.0	0.0057		
L			i i	II.			
Extrapolate	d metals reedrate	es calculated usin	Extrapolated metals feedrates calculated using USEPA approved method.	ed method.			And the second s

[Maximum extrap. value 3 times feed)	3 times feed	(1)					
		A COMMANDE OF THE PROPERTY OF					
		Ξ	[2]	[3]	Æ	Proposed	Proposed
5		Removal		Max. ER at 75%	LVM Feedrate	Extrapolation	Extrapolation
Em. Std.: 92 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	Limit (Pump.)
dender on the state of the stat		(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
The fillent is the second of t	-	99.99919	8802	0.002272	279		
	2	99.99935	7975	0.002058	316		
y w	က	99.99954	9142	0.002359	515		
	Avg	99.99936	8640	0.002230	370	143	143
		Σ	Σ	[3]	Z	Dronoeed	
Unit 3 (SVM)		Removal		Max. ER at 75%	SVM Feedrate	Extrapolation	
Em. Std.: 230 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	
		(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	
	~	99.99875	8802	0.005679	455		
	2	99.99842	7975	0.005145	325		
The second secon	က	99.99897	9142	0.005898	574		
	Avg	99.99871	8640	0.005574	451	193	
		Ξ	[2]	101	1	7	
Unit 3 (Hg)		Removal	I	Max. ER at 75%	Ho Feedrate	Extrapolation	
Em. Std.: 130 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	
		(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	
	-	53.25	8802	0.003210	0.0069		
	7	57.36	7975	0.002908	0.0068		
	က	54.56	9142	0.003334	0.0073		
	Avg	55.06	8640	0.003151	0.0070	0.0057	
	Extrapolate	d metals feedrate	s calculated usir	Extrapolated metals feedrates calculated using USEPA approved method	nd method		

Unit 4 (LVM)	[Maximum extrap. value 3 times feed)	3 times fee	(þe					
Friedrich Frie								
Removal Ramoval Rax ER at 75% LVM Feedrate Extrapolation of Standard OPL Limit (%) (dscfm,7%02) (lb/hr) (lb/hr) (lb/hr) (lb/hr) 1 99.99568 27711 0.007151 1691 (lb/hr) 2 99.99876 27234 0.006628 563 1031 151 3 99.99819 258876 0.006638 563 1031 151 4 4 4 5 5 5 5 5 4 5 6 6 6 6 6 6 6 6 4 7 8 8 8 8 8 8 5 7 7 1 1 1 1 1 1 1 1			Ξ	[2]	23	[4]	Proposed	Proposed
Efficiency (RE) Stackflow Of Standard OPL Limit (%) (dscfm,7%O2) (lb/hr) (lb/hr) (lb/hr) 1 99,99968 27711 0.007151 1691 151 2 99,99862 25683 0.006628 563 1031 151 4 4 99,99882 25683 0.006628 563 1031 151 Efficiency (RE) Stackflow Of Standard OPL Limit (%) (dscfm,7%O2) (lb/hr) (lb/hr) (lb/hr) 1 99,9988 27711 0.017878 1262 Limit 4 4 99,9986 277234 0.016570 914 191 5 99,9979 27234 0.016570 914 191 6 6 7 27234 0.017340 1011 191 7 94,05 27711 0.017370 (lb/hr) (lb/hr) 1 94,05 27711 0.010105 0.170 0.078 7 96,017 27234 0.009981 0.259 0.078 7 96,017 27234 0.009985 0.229 0.078 8 96,17 27234 0.009985 0.229 0.078 8 96,17 25683 0.009985 0.229 0.078 8 96,17 25683 0.009985 0.299 0.078 8 96,17 25683 0.009985 0.299 0.078 8 96,17 25683 0.009985 0.219 0.078 8 8 96,17 25683 0.009985 0.219 0.078 8 96,17 25683 0.009985 0.219 0.078 8 96,17 25683 0.009985 0.219 0.078 8 96,17 25683 0.009985 0.219 0.078 8 96,17 25683 0.009985 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 8 96,17 266876 0.009986 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 8 96,17 266876 0.009986 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 8 96,17 266876 0.009981 0.219 0.078 9 9 9 9 9 9 9 9 9	Unit 4 (LVM)		Removal		Max. ER at 75%	LVM Feedrate	Extrapolation	Extrapolation
1 99.99968 27711 0.007151 1691 1	m. Std.: 92 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	Limit (Pump.)
1 99.99968 27711 0.007151 1691 2 99.9916 27234 0.007028 838 151 Avg 99.9982 25683 0.006628 563 151 Avg 99.9982 256876 0.006936 1031 151 Efficiency (RE) Stackflow of Standard OPL Limit 1 99.9986 27711 0.017878 1262 Limit 2 99.99795 27234 0.017571 856 101 3 99.99879 25683 0.016570 914 Proposed Avg 99.99879 25683 0.016570 914 Proposed 4vg 99.99879 25683 0.016570 914 Proposed 4vg 99.99879 25683 0.016570 914 Proposed 4vg 99.99879 25876 0.017340 (lb/hr) (lb/hr) (lb/hr) 4vg 99.99879 27711 0.010937 (lb/hr) <td< td=""><td></td><td></td><td>(%)</td><td>(dscfm,7%02)</td><td>(lb/hr)</td><td>(lb/hr)</td><td>(lb/hr)</td><td>(lb/hr)</td></td<>			(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
2 99.99916 27234 0.007028 838 3 99.99916 27234 0.006628 563 Avg 99.99919 266876 0.006628 563 Itl [1] [2] [3] [4] Proposed Removal [Max. ER at 75% SVM Feedrate Extrapolation Itl [7] [1] [1] [1] Itl [8] 27711 0.017878 Limit Itl 99.99858 27711 0.017571 858 Itl 99.998795 27234 0.017571 858 Itl 99.99819 25683 0.016570 914 Avg 99.99824 26876 0.017340 1011 191 Avg 99.99824 26876 0.017340 IQHh IIImit Itl [4] Imax. ER at 75% Hg Feedrate Extrapolation Itl [4] Imax. ER at 75% IQHH IQHH Itl [4] IQHH		-	99.99958	27711	0.007151	1691		
3 99.99862 25683 0.006628 563 151 Avg 99.99919 26876 0.006936 1031 151 Removal Removal Max. ER at 75% SVM Feedrate Extrapolation Removal Removal Max. ER at 75% SVM Feedrate Extrapolation 1 99.99858 272741 0.017878 1262 Limit 2 99.99795 27234 0.017571 858 Proposed Avg 99.99874 25683 0.016570 914 Proposed Avg 99.99874 26876 0.017540 1011 191 Avg 99.99874 26876 0.017540 1011 191 Avg 99.99874 26876 0.017540 1011 191 Avg 99.99874 26876 0.0103931 0.259 27711 Avg 1 1 1 1 1 1 94.05 27711 0.010105 0.170 2		2	99.99916	27234	0.007028	838		
Avg 99.99919 26876 0.006936 1031 151 [1] [2] [3] [4] Proposed Removal Removal Max. ER at 75% SVM Feedrate Extrapolation 1 Efficiency (RE) Stackflow of Standard OPL Limit 1 99.9958 27711 0.017678 1262 Limit 2 99.99795 27234 0.017571 858 P4 3 99.99795 27234 0.017571 858 P4 Avg 99.99879 25683 0.015570 914 Proposed Avg 99.99879 256876 0.017340 1011 191 Avg 99.99879 26876 0.010105 0.170 (Ib/hr) 1 94.05 27711 0.010105 0.259 2771 2 96.17 27234 0.009931 0.259 278 4 94.05 27714 0.009931 0.259 278		က	99.99882	25683	0.006628	563		
Columbia Columbia		Avg	99.99919	26876	0.006936	1031	151	151
Removal Rax. ER at 75% SVM Feedrate			Ξ	[2]	5	147	Proposed	
Efficiency (RE) Stackflow Of Standard OPL	Unit 4 (SVM)		Removal		Max. ER at 75%	SVM Feedrate	Extranolation	
(%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 99.99858 27711 0.017878 1262 2 99.99795 27234 0.017571 858 3 99.99819 25683 0.016570 914 Avg 99.99824 26876 0.017340 1011 Removal Removal Rax. ER at 75% Hg Feedrate Efficiency (RE) Stackflow of Standard OPL (%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 94.05 27711 0.01005 0.170 2 96.17 27234 0.009365 0.259 3 95.91 25683 0.009365 0.229 Avg 95.38 26876 0.009801 0.219 Extrapolated metals feedrates calculated using USEPA approved method. 0.219	m. Std.: 230 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	
1 99.99858 27711 0.017878 1262 2 99.99795 27234 0.017571 858 3 99.99819 25683 0.016570 914 Avg 99.99824 26876 0.017340 1011 Femoval 1 1 1 1 Removal Rax. ER at 75% Hg Feedrate Ffficiency (RE) Stackflow of Standard OPL (%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 94.05 27711 0.010105 0.170 2 96.17 27234 0.009931 0.259 3 95.91 256876 0.009365 0.229 Avg 95.38 26876 0.009801 0.219 Extrapolated metals feedrates calculated using USEPA approved method. 0.219			(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	
2 99.99795 27234 0.017571 858 3 99.99819 25683 0.016570 914 Avg 99.99824 26876 0.017340 1011 Removal Ital Ital Ital Ital Removal Nax. ER at 75% Hg Feedrate Ffficiency (RE) Stackflow of Standard OPL (%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 94.05 27711 0.010105 0.170 2 96.17 27234 0.009931 0.259 Avg 95.38 26876 0.009801 0.219 Extrapolated metals feedrates calculated using USEPA approved method.		-	99.99858	27711	0.017878	1262		
3 99.99819 25683 0.016570 914 Avg 99.99824 26876 0.017340 1011 Removal Ital Ital Ital Ital Removal Max. ER at 75% Hg Feedrate Efficiency (RE) Stackflow of Standard OPL (%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 94.05 27711 0.010105 0.170 2 96.17 27234 0.009931 0.259 Avg 95.38 26876 0.009801 0.219 Extrapolated metals feedrates calculated using USEPA approved method.		7	99.99795	27234	0.017571	858		
Avg 99.99824 26876 0.017340 1011 Removal [1] [2] [3] [4] Ffficiency (RE) Stackflow of Standard OPL (%) (dscfm,7%O2) (lb/hr) (lb/hr) 1 94.05 27711 0.010105 0.170 2 96.17 27234 0.009931 0.259 3 95.91 25683 0.009365 0.229 Avg 95.38 26876 0.009801 0.219 Extrapolated metals feedrates calculated using USEPA approved method. 0.219		က	99.99819	25683	0.016570	914		
Till		Avg	99.99824	26876	0.017340	1011	191	
Composition					3 4 1111 (17.2)			
Removal Max. ER at 75% Hg Feedrate			Ξ	[2]	<u></u>	4	Proposed	
Extrapolated metals feedrates calculated using USEPA approved method. Stackflow of Standard OPL	Unit 4 (Hg)		Removal		Max. ER at 75%	Hg Feedrate	Extrapolation	
	m. Std.: 130 ug/dscm		Efficiency (RE)	Stackflow	of Standard	OPL	Limit	
			(%)	(dscfm,7%02)	(lb/hr)	(lb/hr)	(lb/hr)	
		1	94.05	27711	0.010105	0.170		
		7	96.17	27234	0.009931	0.259		
		က	95.91	25683	0.009365	0.229		
Extrapolated metals feedrates calculated using USEPA approved method.		Avg	95.38	26876	0.009801	0.219	0.078	
		Extrapolat	 ted metals feedrate	s calculated usi	ng USEPA approve	ed method.		